Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ TP: \_\_\_\_\_\_\_

HW#72H: Complex Perimeter

Due: Thursday, March 7th

Honors Geometry

**Failure to show all work and write in complete sentences will result in LaSalle!**

**INCLUDE UNITS IN ALL FINAL ANSWERS.**

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| 1) The length of one side of a cube is 3 cm.   1. What is the area of one face of the cube? 2. What is the full surface are of the cube? 3. What is the volume of the cube? | 2) The volume of the prism shown with dimensions below is 216 mi3. What is the full surface area of the prism? |
| 3) A square and a semicircular region have the same perimeter. If the radius of the semicircular region is 8 cm, what is the length of one side of the square?  Exact answer:  Approximate answer: | 4) The diameter of a circle and the hypotenuse of a 30-60-90 triangle have the same length. What is the circumference of the circle if the length of the long leg is 6 inches? |
| 5) The volume of a cube is 1,728 cubic mm.   1. What is the area of one face of the cube? 2. What is the full surface area of the cube? | 6) The hypotenuse of an isosceles right triangle has the same length as one side of a square. The legs of the isosceles right triangle are each 5 meters. What is the area of the square? |
| 7) An 8-foot-by-4-foot garden space is increased by 3 times. If the 8-foot side is increased by 4 feet, how many feet must the 4-foot side have been increased? | 8) The circumference of a circle and the perimeter of an equilateral triangle are the same. If the diameter of the circle is 10 cm, what is the length of the side of the triangle?  Exact answer:  Approximate answer: |